

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)	Examiner: Not Yet Assigned
Q. Cheng et al.	)	
Serial No.:	)	
Not Yet Assigned	)	
Filed:	)	Art Unit: Not Yet Assigned
November 25, 2003	)	
For:	)	
METHOD, SYSTEM, AND	)	
PROGRAM FOR QUERY	)	
OPTIMIZATION WITH	)	
ALGEBRAIC RULES	)	

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT

Dear Sirs:

In accordance with 37 CFR §§ 1.56, 1.97, and 1.98, enclosed please find Form PTO-1449 listing the attached references which might be deemed material to the examination of the above-identified application.

A. Non-English Language References

- ☐ Enclosed is a search report for a counterpart application. The search report Examiner has provided comments on the relevancy of any non-English language references cited in the search report.
- ☐ The specification incorporates comments on the relevancy of Non-English language references.
- ☐ Set forth below are comments provided by the applicant's home country counsel on the relevancy of non-English language references:

- B. ☒ The information disclosure statement submitted herewith is being filed
- 1) within three months of the filing date of a national application other than a continued prosecution application under 1.53(d);
  - 2) within three months of the date of entry into the national stage as set forth in 1.491 in an international application;
  - 3) before the mailing date of a first Office Action on the merits; or
  - 4) before the mailing date of a first Office Action after filing of a Request for Continued Examination under 1.114.
- C. ☐ The information disclosure statement transmitted herewith is being filed *after* the period specified in paragraph B, but before the mailing date of a final action under 1.113, a Notice of Allowance under 1.311, or an action otherwise closing prosecution, and is accompanied by:
- 1) a Statement under 1.97(e); or
  - 2) a fee of \$180 as set forth in 1.17(p).
- D. ☐ The information disclosure statement transmitted herewith is being filed *after* the period specified in paragraph C, but before payment of the issue fee, and is accompanied by:
- 1) a Statement under 1.97(e); and
  - 2) a fee of \$180 as set forth in 1.17(p).

**STATEMENT UNDER 1.97(e)**

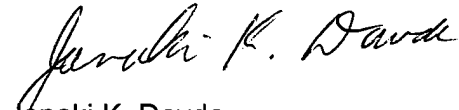
I, the person signing below, certify

- ☐ that each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the statement. 37 C.F.R. §1.97(e)(1).
- ☐ that no item of information contained in the information disclosure statement was

cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 1.56(c) more than three months prior to the filing of the statement. 37 C.F.R. §1.97(e)(2).

If required under paragraph C or D *supra*, enclosed is Applicant's check in the amount of \$180 as set forth in 1.17(p). Please charge any insufficiency or credit any overpayment to Deposit Account No. 09-0460. A duplicate of this letter is enclosed for fee processing.

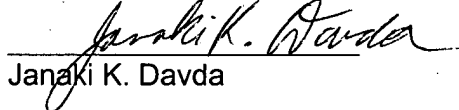
Respectfully submitted,



Janaki K. Davda  
Registration No. 40,684  
KONRAD RAYNES & VICTOR, LLP  
315 S. Beverly Drive, Suite 210  
Beverly Hills, CA 90212  
(310) 556-7983  
(310) 556-7984 (fax)

Dated: November 25, 2003

I hereby certify that this correspondence is being deposited with the United States Postal Service as express class mail in an envelope addressed to: Commissioner for Patents, Alexandria, VA 22313-1450 on November 25, 2003.

  
Janaki K. Davda

11/25/03  
(Date)

Form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)				<i>Complete if Known</i>	
				<b>Application Number</b>	Not Yet Assigned
				<b>Filing Date</b>	November 18, 2003
				<b>First Named Inventor</b>	Q. Cheng et al.
				<b>Art Unit</b>	Not Yet Assigned
				<b>Examiner Name</b>	Not Yet Assigned
				<b>Attorney Docket Number</b>	SVL920030080US1
Page	1	of	2		

U.S. PATENT DOCUMENTS					
Examiner Initials	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number- Kind Code (if known)			
		US-2002/0007385	01/17/2002	Stoutemyer	
		US-2002/0188600	12/12/2002	Lindsay et al.	
		US-2002/0198867	12/26/2002	Lohman et al.	
		US-2003/0018618	01/23/2003	Bestgen et al.	
		US-2003/0088558	05/08/2003	Zaharioudakis et al.	
		US-2003/0093415	05/15/2003	Larson et al.	
		US-2003/0093407	05/15/2003	Cochrane et al.	
		US-5,987,453	11/16/1999	Krishna et al.	
		US-6,032,144	02/29/2000	Srivastava et al.	
		US-6,449,605	11/10/2002	Witkowski	
		US-6,460,027	10/01/2002	Cochrane et al.	
		US-6,516,310	02/04/2003	Paulley	
		US-6,546,381	04/08/2003	Subramanian et al.	
		US-6,567,802	05/20/2003	Popa et al.	
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS						
Examiner Initials	Cite No.	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Country Code- Number- Kind Code				

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Page	2	of	2	Attorney Docket Number	SVL920030080US1

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T
		U.S. Patent Application Serial No. 09/502,821, filed on February 11, 2000, entitled " <i>Optimizing Queries Using Automatic Summary Tables</i> ," invented by R.J. COCHRANE, G.L. LAPIS, T.Y. LEUNG, M. A. PASKIN, M. H. PIRAHESH, Y. SUN, M. S. URATA AND M. ZAHARIOUDAKIS.	
		U.S. Patent Application Serial No. 09/412,033, filed on October 4, 1999, entitled " <i>Schema Mapping System and Method</i> ," invented by N. SUBRAMANIAN and S. VENKATARAMAN.	
		ZAHARIOUDAKIS, M., R. COCHRANE, G. LAPIS, H. PIRAHESH and M. URATA. " <i>Answering Complex SQL Queries Using Automatic Summary Tables</i> ." Proceeding of the 2000 ACM SIGMOD International Conference on the Management of Data, pp. 105-116, Dallas, Texas, 2000.	
		ROSENTHAL, A. and D. REINER. " <i>Extending the Algebraic Framework of Query Processing to Handle Outerjoins</i> ." Proceedings of the Tenth International Conference on Very Large Data Bases, pp. 334-343, Singapore, August, 1984.	
		PIRAHESH, H., J.M. HELLERSTEIN and W. HASAN. " <i>Extensible/Rule Based Query Rewrite Optimization in Starburst</i> ." Proceedings of ACM SIGMOD '92 International Conference on Management of Data, pp. 39-48, San Diego, CA, 1992.	
		GODFREY, P., J. GRYZ and C. ZUZARTE. " <i>Exploiting Constraint-Like Data Characterizations in Query Optimization</i> ." Proceedings of the 2001 ACM SIGMOD International Conference on the Management of Data, pp. 582-592, Santa Barbara, CA, 2001.	
		GRYZ, J., B. SCHIEFER, J. ZHENG and C. ZUZARTE. " <i>Discovery and Application of Check Constraints in DB2</i> ." Proceedings of ICDE, 5 pages, Heidelberg, Germany, 2001.	
		CHENG, Q., J. GRYZ, F. KOO, C. LEUNG, L. LIU, X. QIAN and B. SCHIEFER. "Implementation of Two Semantic Query Optimization Techniques in DB2 Universal Database." Proceedings of the 25 <sup>th</sup> VLDB Conference, 12 pages, Edinburgh, Scotland, 1999.	
		IBM Technical Disclosure Bulletin. " <i>Access Path Selection in Relational Database Systems</i> ," by M.S. LAKSHMI and P.S. YU, Vol. 30, No. 9, February 1988, pp. 420-421.	
		U.S. Patent Application filed on October 31, 2003 entitled " <i>A Method for Discovering Undeclared and Fuzzy Rules in Databases</i> ," invented by BROWN, et al.	

Examiner Signature		Date Considered	
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.			